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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,329	05/15/2001	Ricky Ah-Man Woo	8086	1099

27752 7590 05/04/2004

THE PROCTER & GAMBLE COMPANY
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EXAMINER

KRISHNAN, GANAPATHY

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 05/04/2004

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/855,329

pplicant(s)

WOO ET AL.

Examiner

Ganapathy Krishnan

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– The MAILING DATE of this communication appears n the cover sheet with the correspond nce address –

Peri d f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disp sition of Claims

- 4) ☒ Claim(s) 1,4,5,9-17,20,21,25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-15 is/are allowed.
- 6) ☒ Claim(s) 1,5,10,11,16,17,21 and 26 is/are rejected.
- 7) ☒ Claim(s) 4,9,20 and 24 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachm nt(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Pat nt Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

Claims 4, 9 and 25 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 4, 9 and 25 depend from cancelled claims.

Claim Rejections - 35 USC § 112

Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 recites the term derivative. In the absence of the specific derivatizations to the chemical core claimed or distinct language to describe the structural modifications or the chemical names of the derivatives of this invention, the identity of said derivatives would be difficult to describe and the metes and bounds of the said derivatives applicants regard as the invention cannot be sufficiently determined because they have not been particularly pointed out or distinctly articulated.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Trinh et al (WO 96/04937).

Claims 1 and 5 are drawn to a composition comprising low-degree of substitution cyclodextrin derivative wherein the cyclodextrin derivative is selected from the group consisting of hydroxyalkyl cyclodextrin having an average degree of substitution of less than 5.0 and alkylated cyclodextrin having an average degree of substitution of less than about 6.0; wherein the cyclodextrin derivative is selected from the group consisting of alpha-, beta- and gamma-cyclodextrin derivatives and hydroxyalkyl beta-cyclodextrin having an average degree of substitution of less than 4.0, a hydroxypropyl beta-cyclodextrin derivative having an average degree of substitution of about 3,3 and a low degree of substitution alkylated-beta-cyclodextrin and mixtures thereof. Claims 16, 17 and 21 are drawn to a method of capturing unwanted molecules comprising applying to a surface a composition comprising a low degree of substitution cyclodextrin derivative wherein the cyclodextrin derivative is selected from the group consisting of hydroxyalkyl cyclodextrin having an average degree of substitution of less than 5.0 and alkylated cyclodextrin having an average degree of substitution of less than 6.0; wherein a perfume and also of alpha-, beta- and gamma-cyclodextrin derivatives.

Trinh et al teach a composition comprising hydroxypropyl alpha-cyclodextrin, hydroxypropyl beta-cyclodextrin and perfume (example VIII, page 37). The average degree of substitution of the hydroxypropyl dextrans is about 4.9 (page 37, lines 15-19). This teaching meets the limitations of claim 1 since the composition contains a hydroxyalkyl (hydroxypropyl) cyclodextrin with an average degree of substitution of 4.9 (less than 5.0). This also meets the

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limitations of claim 5 since one of the Markush group members is an alpha-cyclodextrin derivative. Trinh's composition has hydroxypropyl alpha cyclodextrin, which is an alpha cyclodextrin derivative.

Claims 16, 17 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Trinh et al (WO 96/04937).

Claims 16, 17 and 21 are drawn to a method of capturing unwanted molecules comprising applying to a surface a composition comprising a low degree of substitution cyclodextrin derivative wherein the cyclodextrin derivative is selected from the group consisting of hydroxyalkyl cyclodextrin having an average degree of substitution of less than 5.0 and alkylated cyclodextrin having an average degree of substitution of less than 6.0 and allowing it to dry; wherein a perfume and also of alpha-, beta- and gamma-cyclodextrin derivatives.

Trinh et al teach a composition comprising hydroxypropyl alpha-cyclodextrin, hydroxypropyl beta-cyclodextrin and perfume (example VIII, page 37). The average degree of substitution of the hydroxypropyl dextrans is about 4.9 (page 37, lines 15-19). Trinh also teaches a method of treating a surface using the compositions of his invention and allowing it to dry (page 43, lines 1-8). This meets the limitations of claim 16. The compositions used in the above method have a perfume. This meets the limitation of claim 17. The composition used in the above method has hydroxypropyl alpha cyclodextrin, which is an alpha cyclodextrin derivative. This meets the limitation of claim 21.

Joint Inventors

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trinh et al (WO 96/04937).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 10 is drawn to a composition comprising low-degree of substitution cyclodextrin derivative wherein the cyclodextrin derivative is selected from the group consisting of hydroxyalkyl cyclodextrin having an average degree of substitution of less than 5.0 and alkylated

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cyclodextrin having an average degree of substitution of less than about 6.0 and further containing non-derivatized cyclodextrins selected from alpha-, beta- and gamma cyclodextrins and Claim 10 is drawn to a method of capturing unwanted molecules using the same composition.

Trinh et al teach a composition comprising hydroxypropyl alpha-cyclodextrin, hydroxypropyl beta-cyclodextrin and perfume (example VIII, page 37). The average degree of substitution of the hydroxypropyl dextrins is about 4.9 (page 37, lines 15-19). This teaching meets the limitations of claim 1 since the composition contains a hydroxyalkyl (hydroxypropyl) cyclodextrin with an average degree of substitution of 4.9 (less than 5.0).). Trinh teaches a method of treating a surface using the compositions of his invention and allowing it to dry (page 43, lines 1-8). Trinh also teaches that it is preferable to use a mixture of cyclodextrins, preferably at least a portion of the cyclodextrins is alpha or gamma cyclodextrins (page 7, lines 1-9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make a composition comprising a cyclodextrin derivative selected from the group consisting of hydroxyalkyl cyclodextrin having an average degree of substitution of less than 5.0 and alkylated cyclodextrin having an average degree of substitution of less than about 6.0 and further comprising a non-derivatized alpha- or gamma-cyclodextrin and use the composition in a method for capturing unwanted molecules since this combination and the method as instantly claimed is suggested in the prior art.

One of ordinary skill in the art would be motivated to make a composition with such a mixture absorbs odors more broadly by complexing a wider range of odoriferous molecules

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having a wider range of molecular sizes (page 7, lines 1-3). Using such a composition in a method for removing unwanted molecules would make the method more efficient.

Conclusion

1. Claims 1, 5, 10, 11, 16, 17, 21 and 26 are rejected.
2. Claims 4, 9 and 25 are objected to as being of improper dependent form.
3. Claim 20 is objected to as being dependent upon a rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 10 and 26 are drawn to compositions further comprising non-derivatized cyclodextrins. Claim 20 is drawn to a method which uses hydroxyalkyl cyclodextrin having an average degree of substitution of less than 4.5 or alkylated cyclodextrin having an average degree of substitution of less than 5.5 all of which are non obvious from the teachings of the prior art.
4. Claims 12-15 are allowable since the obviousness-type double patenting of these claims has been overcome by filing a Terminal Disclaimer.

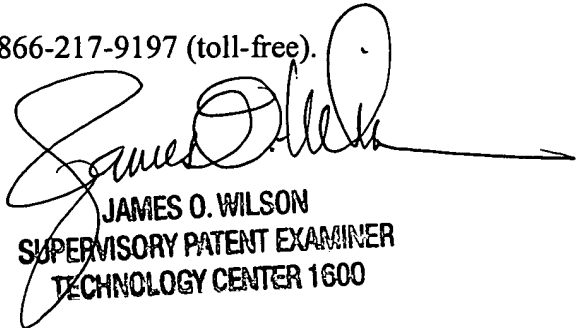
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ganapathy Krishnan whose telephone number is 571-272-0654. The examiner can normally be reached on 8.30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GK



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